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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,711	07/14/2003	Katsumi Terakawa	2927-0150P	4189

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EXAMINER	
FERGUSON, LAWRENCE D	
ART UNIT	**PAPER NUMBER**
1774	

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/617,711	TERAKAWA ET AL.	
	Examiner	Art Unit	
	Lawrence D. Ferguson	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,5 and 7-13* is/are rejected.

7)☒ Claim(s) *2-3* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed October 31, 2005. Claims 1-5 and 7 were amended and claims 10-13 were added rendering claims 1-13 pending.

New Matter - 35 U.S.C. 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. 'wherein a thickness of the surface coating layer is 3 to 30um' is not supported by the specification. The Examiner was not able to find support for the added limitation discussed above at the cited portions (page 22, line 22) of the specification.

Claim Rejections – 35 USC § 102(b)

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 4-5 and 7-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Schlueter, Jr. et al. (U.S. 5,952301).

Schlueter, Jr. discloses a conductive belt comprising an electroconductive substrate (base) layer, an intermediate layer made of elastomer material and an outer layer made of rubber (column 8, lines 36-45) where the belt material has physical characteristics such as tensile modulus of 300,000 to about 1,5000,000 PSI and volume electric resistance of 10^8 to 10^{11} ohm cm (column 3, lines 24-31 and column 5, line 56 through column 6,line 6). Schlueter, Jr. further discloses the intermediate layer has a hardness of from about 25 to about 80 Shore A and a thickness from about 25 to about 5,000 micrometers (column 8, lines 50-60). The thickness of the base layer is from about 25 to about 150 micrometers (column 5,lines 56-59) and the thickness of the outer coating layer is 25 to 5000 micrometers, having a volume resistivity of 10^4 to 10^{16} (column 8,lines 15-23). Schlueter discloses the belt can be used in a printing machine (column 1, lines 5-6 and column 11,lines 31-33). Because Schlueter, Jr. discloses a conductive belt comprising an electroconductive belt layer, intermediate layer made of

elastomer and a surface coating layer, it is inherent for the volume electric resistance to have the same value and condition as in instant claim 5. The claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). Mere recitation of newly-discovered function or property, inherently possessed by things in prior art, does not cause claim drawn to those things to distinguish over prior art. The Patent Office can require applicant to prove that subject matter shown to be in prior art does not possess characteristic relied on where it has reason to believe that functional limitation asserted to be critical for establishing novelty in claimed subject matter may be inherent characteristic of prior art; this burden of proof is applicable to product and process claims reasonably considered as possessing allegedly inherent characteristics. In claims 8 and 9 the phrases, "said base layer is composed of a centrifugally molded seamless belt substrate; said intermediate layer if formed...and hardening said material" and "said base layer is composed of a seamless belt substrate by applying said seamless belt substrate by a dispenser and drying and hardening said seamless belt substrate...and hardening said material" respectively introduces a process limitation to the product claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966. Further, process limitations are given no patentable weight in product claims.

Claim Rejections – 35 USC § 103(a)

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schlueter, Jr. et al. (U.S. 5,952301) in view of Nakazawa et al (U.S. 6,852,400).

Schlueter, Jr. is relied upon for claim 1. Schlueter, Jr. does not disclose a flame retardant compound in the intermediate layer. Nakazawa teaches an intermediate transfer belt having a three-layer configuration (column 4, lines 55-57) where the belt material comprises a high level of flame retardancy (column 5,lines 21-33). Therefore, it would have been obvious to one of ordinary skill in the art to have employed the flame retardant material, as taught in Nakazawa, in the conductive belt of Schlueter, Jr. to provide improved durability and resiliency of the belt.

7. Claims 2-3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art does not teach or suggest the recited conductive belt further comprising an intermediate layer composed of a polyurethane elastomer containing a polyol containing polypropylene glycol or/and a hydroxyl-terminated liquid rubber moiety as a main component thereof and aromatic moiety or/and a polyol moiety and said surface coating layer is made of a rubber, an elastomer, or a resin."

The closest prior art does not teach or suggest the recited conductive belt further comprising a polyurethane elastomer containing the polypropylene glycol polyol containing a hydroxyl-terminated liquid rubber moiety as the main component thereof and said aromatic moiety.

Response to Arguments

8. Arguments of rejection made over 35 U.S.C. 103(a) as being unpatentable over Schlueter, Jr. et al. (U.S. 5,952301) in view of Tanaka et al (U.S. 5,978,638) has been considered and Tanaka has been withdrawn. Schlueter, Jr. remains in the rejection. Applicant argues the thickness referred to at column 5, lines 56-59 and the resistivity referred to at column 8, lines 15-23, are directed to a single and double layered belt configuration, respectively, and not a three-layered configuration. The single layer belt member is one component of Schlueter's invention, which further includes a two and three layer configuration. The additional layers do not appear to affect the properties and/or characteristics of the base layer or the double layer, therefore Examiner interprets the base layer of the single, double and triple layer configurations to have a thickness from about 25 to about 150 micrometers (column 5,lines 56-59) and the volume resistivity of 10^4 to 10^{16} being in the double and three layer configurations, absent any evidence to the contrary.

Arguments of rejection made over 35 U.S.C. 103(a) as being unpatentable over Schlueter, Jr. et al. (U.S. 5,952301) in view of Tanaka et al (U.S. 5,978,638) further in view of Nakazawa et al (U.S. 6,852,400) has been considered and Tanaka has been

withdrawn. Schlueter, Jr. and Nakazawa remain in the rejection. Applicant argues Nakazawa does not cure the deficiencies of Schleuter, Jr. Because Schleuter, Jr. has been maintained, Nakazawa is also maintained for reasons of record.

Applicant argues the cited art is not obvious over the instantly claim invention because the examples in the specification show unexpected results over the comparative examples. Examiner is not persuaded by this argument because Applicant has not shown the instantly claimed invention have unexpected results over the Schlueter and Nakazawa references, only over the comparative examples found in the specification. Applicant must show that the claimed invention has unexpected results compared to Schlueter, Jr. and Nakazawa to overcome the rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LF

Lawrence Ferguson
Patent Examiner
AU 1774

RENA DYE
SUPERVISORY PATENT EXAMINER
A.U. 1774 1/5/07